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ABSTRACT

This study assessed the extent to which the emergence and maintenance of peer group-status and behavior reflect the operation of group processes and individual processes. Of specific concern was whether support could be found for empirical relations derived from the self-perpetuation hypothesis. The study, which concerned the constructs of cognitive bolstering and behavioral confirmation, focused on the process through which perceivers confirm their expectations cognitively and treat others behaviorally in ways that cause them to confirm the perceivers' expectancies about them. To examine these relations, 108 boys between 7 and 8 years of age were assigned to 36 triads. Triads consisted of boys from three social status groups--popular, rejected, and neglected--who were acquainted or unacquainted with each other. Each group participated in a series of four 1-hour play sessions. Recordings were made of various social behaviors during the play sessions and each boy was interviewed about his expectations of, memory for, and interpretation of his own and his partners' social behaviors. Preliminary analyses suggest some validity for the self-perpetuation explanation of the stability of social status and behavior in children's peer relationships. (Author/RH)

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ON THE SELF-PERPETUATING NATURE OF CHILDREN'S PEER RELATIONSHIPS

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Abstract

The research project generally assesses the extent to which the emergence and maintenance of peer group-status and -behavior reflect the operation of group processes and individual processes. The research reported here specifically examines whether support can be found for empirical relations derived from the 'self-perpetuation' hypothesis (i.e. cognitive bolstering and behavioral confirmation).

To examine these relations, 108 7-to-8 year-old boys formed 36 groups of three boys each. Groups consisted of boys from three social status groups (popular , rejected, neglected) who were acquainted or unacquainted to each other. Each group participated in a series of four one-hour play sessions. Recordings were made of various social behaviors during the play sessions and each boy was interviewed about his expectations of, memory for and interpretation of his own and his interaction partners' social behaviors. Preliminary analyses reveal that there is some validity to the specified relations.

Purpose

The quality of a child's peer relationships is frequently expressed in her/his social status in the peer group. Research has shown that children of different social status types (e.g., popular vs. rejected) can be characterized by different patterns of social interactive behaviors (Dodge, 1983; Dodge, Pettit, McClaskey & Brown, 1986). Research has also shown that children's social status in the peer group is moderately stable across time (Coie & Dodge, 1983) and predictively related to (mal)adjustment in later life (Asher & Gottman, 1981). The purpose of the present study is to ascertain whether the stability of social status and concomitant patterns of social behavior can be understood in terms of self-perpetuation processes (Snyder, 1981).

Stability of status and behavior

Suppose that, in a longitudinal design, social behavior has been measured at t_0 and t_2 and social status has been measured at t_1 and t_3. Figure 1 illustrates the stability of social status and social behavior and their reciprocal relationship in this design. Arrows 1 and 2 specify the stability of social status and behavior, respectively. The reciprocal relationship between social status and behavior is

specified by arrows 3-to-5. Since the model is longitudinal in nature, all arrows are unidirectional.

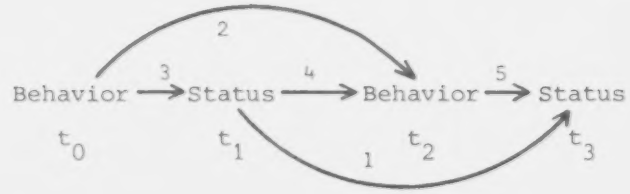

Fig.1.-Stability of status and behavior.

Self-perpetuation processes

According to Merton (1957), the term 'self-fulfilling prophecy' refers to an initially false conception of one person about another that evokes new behaviors which, in turn, make the originally false conception come true. This can be interpreted as a process by which the perceiver's expectancies about a target alter the target's behaviors in ways that confirm the perceiver's expectancies. In addition, independently of whether the target's behaviors objectively confirm the perceiver's expectancies, the perceiver

Purpose (Cont.)

will interpret the target's behaviors in accordance with her/his initial expectancies (Darley & Fazio, 1980). These two self-perpetuating processes have been coined behavioral confirmation and cognitive bolstering (Snyder, 1981) and are illustrated in Figure 2.

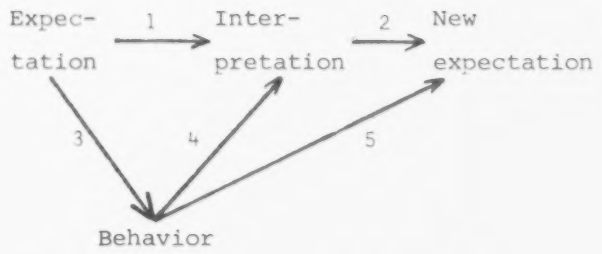

Fig.2.-Cognitive bolstering and behavioral confirmation.

Cognitive bolstering refers to the way in which a perceiver (interaction partner) processes information about a target child to provide the perceiver with expectancy-confirming information more readily than expectancy-disconfirming evidence. Cognitive bolstering works retrospectively (arrow 1) through expectation-guided preferential remembering and selective reinterpretation of the target child's behavior. Cognitive bolstering also works prospectively (arrow 3) through the selective perception of new information about the target child that supports current expectations.

Behavioral confirmation (arrows 3-to-5) refers to the fact that the perceiver's expectancies channel the subsequent social interaction between the perceiver and the target child in a way that causes the target's behavior to confirm these expectancies.

To summarize, perceivers confirm their expectations cognitively and treat targets in ways that cause them to confirm the perceiver's expectancies about the targets behaviorally. This set of relationships not only applies to the perceiver's expectations about the target, but also to the target's self-expectations (Miller & Turnbull, 1986; Snyder, 1981). The target child's new behavior may be internalized in the child's self-conception, thereby channeling the child's own future expectations and behavior which results in a confirmation of the initial expectancies in new interaction contexts.

Purpose (Cont.)

Specification of the LISREL VI model

The purpose of the present study is to explain the stability of children's social status and behavior in terms of these processes of self-perpetuation. The integration of the relations presented in Figure 1 (the phenomenon to be explained) with the relations presented in Figure 2 (the explanatory mechanism) results in the model to be tested in this study. This model is presented below in Figure 3. Since expectations, interpretations, and social behavior were each measured at two times (see the Method section), the causal relations specifying cognitive bolstering and behavioral confirmation enter into both the left and right parts of the upper and lower halves of the model. To validate the self-perpetuation explanation of the stability of children's peer status and social behavior, the relations predicted will be tested using LISREL VI (Jöreskog & Sörbom, 1984).

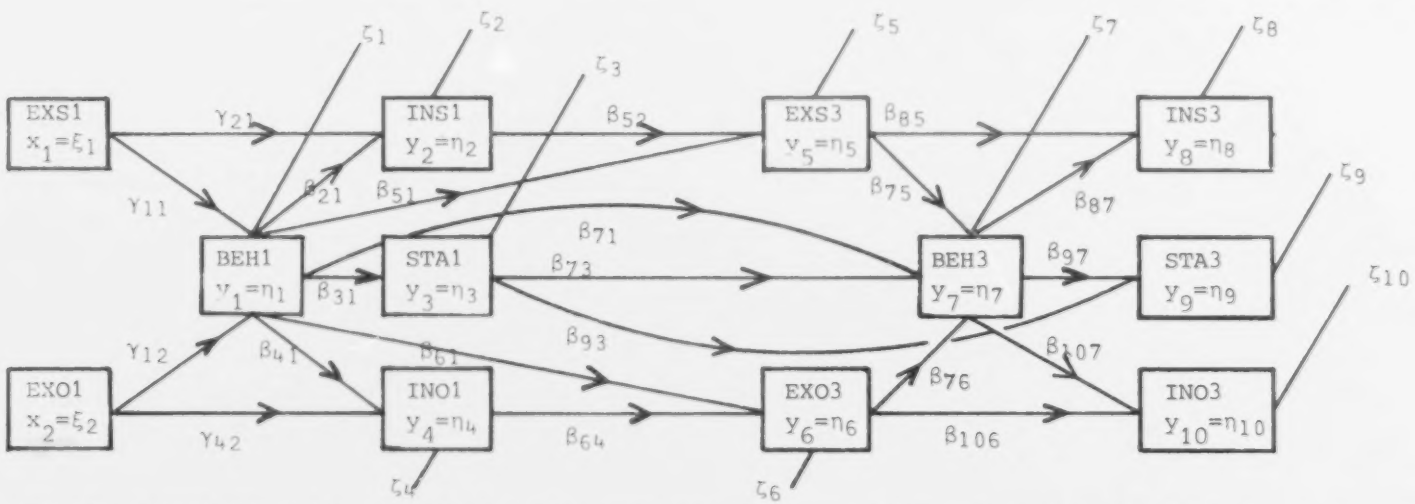

Fig.3.-LISREL VI model of relations between expectations, interpretations and behavior. EX-Expectation; IN-Interpretation; BEH-Behavior; STA-Status; S-Self; O-Other; 1/3-Session 1/3.

Method

Participants and Overview of the Procedure

The present study is part of a larger research project in which 231 boys from two age groups (5-6 years old; 7-8 years old) had been selected for participation. The boys were selected based on their popular, rejected or neglected status in the eyes of their classmates. Each boy participated in a series of four one-hour play sessions with two other boys of his age. In half of the groups, the boys were acquainted with each other (classmates), whereas the remaining half were unacquainted with each other (age-mates from different schools). Play sessions were separated by a one-week interval and consisted of a cooperative, competitive and free-play phase. Videotape recordings were made of the boys' social behavior during the play sessions. Each boy was interviewed before each session concerning his expectations of his own and his interaction partners' social behaviors and after each session concerning his interpretation of his own and his interaction partners' social behaviors.

In this presentation, only measures from the first and third sessions will be reported for the oldest age group. This sample consisted of 108 boys aged 6;0 to 8;7 years (mean age 7;5 years).

Task description

Behavioral measures were derived from the competitive phase of the first and third session, in which children played the Tower Game that was supervised by an adult experimenter. At the beginning of the game, the three boys were seated at the edge of a 2.10 x 2.50 m. carpet. The experimenter placed a set of wooden blocks in the middle of the carpet. Each boy's goal was to build a tower from the blocks and children were told that the boy who built the largest tower would win the game. Children were given exactly three minutes to play the game. After the start signal, the experimenter intermittently mentioned how much time was left in order to create time pressure. At the end of the three minutes, the experimenter declared a winner, and the Tower Game was played a second time for another three minutes.

Method (Cont.)

Behavioral measures

Behavioral measures were derived from the videotape recordings of the boys' social behavior during the Tower Game. The following six behaviors were observed: Cooperation, Fighting, Disruption, Shyness, Help seeking and Leadership. To determine reliability, one sixth of the videotaped material was scored two times. Except for Cooperation in Session 1, all categories were scored reliably. Reliability coefficients varied from .79 to .99 for all other categories in Session 1 and varied from .87 to .99 for all observed categories in Session 3.

Expectation and interpretation measures

For each session, expectation measures were taken from the pre-play interview. Expectations were measured by asking each boy to rate how much he expected himself and each interaction partner to engage in each of the six behaviors Cooperation, Fighting, Disruption, Shyness, Help seeking and Leadership during the play session. Interpretation measures were derived from the post-play interview of each session. Interpretations were measured by asking each boy to rate how much he thought he and each interaction partner had actually engaged in each of the six aforementioned behaviors

during the play session. All ratings were made on a 5-point scale (1 = never; 5 = very very often) that the boys had been trained to use.

Results

The sample size (N=108) was not large enough to test the model shown in Figure 3 as a latent variable model with six indicators per variable. Therefore, the model was tested using LISREL VI for each of the six behavioral categories separately. The results of these analyses are summarized in Table 1. With the exception of Leadership, Table 1 indicates that the model accounts for a relatively high proportion of the variance with relatively small amounts of residual variance to be explained. Due to lack of fit, the Leadership variable will not be further analyzed.

Based on maximum-likelihood estimates, standardized parameter estimates were computed. Table 2 presents the standardized solution for Fighting. The same pattern of estimates was found for Cooperation, Disruption, Shyness and Help seeking. Parameters β_{71} and β_{93} were relatively high indicating that status and behavior were each stable. The parameters estimating the status-behavior link showed, however, inconsistent results.

TABLE 1

Goodness-of-Fit Indices for Model of Figure 3

Index	Cooperation	Fighting	Disruption	Shyness	Help seeking	Leadership
Coeff. of determination	.09	.22	.33	.24	.49	.26
χ^2 (df)	202.76 (44)	244.47 (44)	196.19 (44)	229.21 (44)	123.95 (44)	------
Goodness-of-fit index	.77	.77	.80	.80	.85	.47
Adj. goodness-of-fit index	.60	.60	.64	.63	.74	.06
Root mean square residual	.17	.19	.16	.13	.11	---

Results (Cont.)

A very consistent pattern was found for the coefficients estimating the effects between expectations, behavior and interpretations for both target- and perceiver measures in Sessions 1 and 3. Stated briefly: the effect of expectations on interpretations was higher than both the effect of expectations on behavior and the effect of behavior on interpretations. In addition, the effect of interpretations on new expectations was higher than the effect of behavior on new expectations , with only a few exceptions.

TABLE 2

Standardized Effect Estimates for Fighting

Coeff.	Effect	Coeff.	Effect	Coeff.	Effect
γ_{11}	.08	β_{51}	-.14	β_{75}	-.08
γ_{21}	.24	β_{61}	-.27	β_{85}	.34
γ_{12}	.07	β_{71}	.30	β_{76}	.11
γ_{42}	.38	β_{52}	.03	β_{106}	.49
β_{21}	.10	β_{73}	.26	β_{87}	-.06
β_{31}	-.10	β_{93}	.69	β_{97}	-.17
β_{41}	.30	β_{64}	.45	β_{107}	.05

Discussion

This study presents a preliminary test of the self-perpetuation explanation of the stability of social status and behavior in children's peer relationships. The results indicate that there is at least some validity to this approach. Although the coefficients of determination were not very high, the fit measures of around .80 give indications for the existence of cognitive bolstering and behavioral confirmation effects. This is in line with Dodge et al.'s (1986) recent publication on the relationship between social information processing and social behavior.

The effect estimates showed stronger cognitive bolstering than behavioral confirmation effects. This difference may reflect, however, the low relationship that is generally found between ratings of behavior and actual behavioral measures. These analyses are nevertheless incomplete and several technical questions can only be resolved when the complete data set becomes available. In addition, the mechanism of behavioral confirmation has not yet been completely specified in the model. Extra arrows are needed between perceiver expectations, perceivers' behaviors toward the targets, and the targets' own behaviors. For this purpose, children's social behavior will have to be observed anew treating the dyad as the unit of analysis.

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